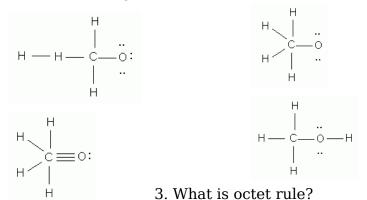
## **Assignment 1: Fundamental of Organic Chemistry**

- 1. Draw the Lewis structure for formaldehyde, CH<sub>2</sub>O.
- 2. Which of the following is the correct Lewis structure for methanol, CH<sub>4</sub>O?



- 4. Draw the hybridization structure diagram for below:
  - HC≡C-C-C, H H C=C, CH₃ H H C=C, CH₃
- 5. Draw the Lewis structure for diatomic nitrogen molecule.
- 6. The hybridization of the central carbon in  $CH_3C\equiv N$  and the bond angle CCN are
  - a.  $sp_2$ , 180°. b. sp, 180°. c.  $sp_2$ , 120°. d.  $sp_3$ , 109°.
- 7. What are the hybridizations of carbons 1 and 2 respectively in the following structure?

$$\bigcap_{1}$$

8. Draw the below condensed structure in line angle formula